

**Amendment to the Claims:**

This listing will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

Claim 1. (currently amended) A film of a ~~multimodal~~ bimodal polyethylene produced by polymerization catalysed by a single site catalyst having more than one  $\eta^5$ -cyclic ligand said ~~multimodal~~ bimodal polyethylene comprising

- ai) a lower molecular weight homopolymer of ethylene and
- bi) a higher molecular weight terpolymer of ~~ethylene and two comonomers selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins~~ ethylene, 1-butene and a C<sub>6</sub> to C<sub>12</sub> alpha-olefin,

or

- aii) a lower molecular weight polymer which is a binary copolymer of ethylene and a comonomer selected from C<sub>4</sub> to C<sub>12</sub> ~~alpha-olefin~~ alpha-olefins and
- bii) a higher molecular weight polymer which is either a binary copolymer of ethylene and 1-butene, if the lower molecular weight polymer of aii) is a binary copolymer of ethylene and a C<sub>6</sub> to C<sub>12</sub> alpha-olefin, or a terpolymer of ethylene, 1-butene and a comonomer selected from C<sub>6</sub> to C<sub>12</sub> alpha-olefin;

~~a C<sub>4</sub> to C<sub>12</sub> alpha-olefin comonomer different from the comonomer employed in aii)~~  
~~or a terpolymer with two comonomers selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins;~~

or

~~\_\_\_\_\_ aiii) a lower molecular weight terpolymer of ethylene and two comonomers  
selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins;~~

~~\_\_\_\_\_ biii) a higher molecular weight terpolymer of ethylene and two comonomers  
selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins;~~

wherein all components are made by the same catalyst.

Claim 2. (previously presented) A film as claimed in claim 1 wherein said comonomers are selected from the group consisting of: but-1-ene, hex-1-ene, 4-methyl-pent-1-ene, hept-1-ene, oct-1-ene and dec-1-ene.

Claim 3. (original) A film as claimed in claim 2 wherein said comonomers are but-1-ene and hex-1-ene.

Claim 4. (currently amended) A film as claimed in claim 1 ~~wherein said polyethylene is a bimodal polyethylene~~ wherein the lower molecular weight component constitutes from 30 to 70% wt of the polyethylene.

Claim 5. (previously presented) A film as claimed in claim 1 wherein the comonomer content of said polyethylene is 0.1 to 10% mol.

Claim 6. (previously presented) A film as claimed in claim 1 wherein the density of said polyethylene is from 905 to 930 kg/m<sup>3</sup>.

Claim 7. (previously presented) A film as claimed in claim 1 wherein the weight average molecular weight of said polyethylene is 50000 to 250000 g/mol.

Claim 8. (previously presented) A film as claimed in claim 1 wherein the molecular weight distribution of said polyethylene is from 3 to 8.

Claim 9. (previously presented) A film as claimed in claim 1 wherein the MFR<sub>2</sub> of

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said polyethylene is 0.4 to 3 g/10 min.

Claim 10. (previously presented) A film as claimed in claim 1 wherein said polyethylene is blended with a further polymer.

Claim 11. (original) A film as claimed in claim 10 wherein said further polymer is a low density polyethylene (LDPE).

Claim 12. (previously presented) A film as claimed in claim 1 comprising a plurality of layers.

Claim 13. (previously presented) A film as claimed in claim 1 produced by extrusion using a blow up ratio of from 2:1 to 4:1.

Claims 14-22. (canceled)

Claim 23. (currently amended) A film as claimed in claim 1 wherein said bimodal polyethylene comprises

- aii) a lower molecular weight polymer which is a binary copolymer of ethylene and a  $\alpha$ -comonomer selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefin and
- bii) a higher molecular weight polymer which is either a binary copolymer of ethylene and 1-butene, if the lower molecular weight polymer of aii) is a binary copolymer of ethylene and a C<sub>6</sub> to C<sub>12</sub> alpha-olefin, or a terpolymer of ethylene, 1-butene and a comonomer selected from C<sub>6</sub> to C<sub>12</sub> alpha-olefin.

Claim 24. (currently amended) A polyethylene composition for film production, said composition comprising a ~~multimodal~~ bimodal polyethylene produced by polymerization catalysed by a single site catalyst having more than one  $\eta^5$ -cyclic  $\eta^5$ -cyclic ligand comprising

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- ai) a lower molecular weight homopolymer of ethylene and
- bi) a higher molecular weight terpolymer of ~~ethylene and two comonomers~~  
~~selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins~~ ethylene, 1-butene and a C<sub>6</sub> to  
C<sub>12</sub> alpha-olefin,

or

- aii) a lower molecular weight polymer which is a binary copolymer of  
ethylene and a comonomer selected from C<sub>4</sub> to C<sub>12</sub> ~~alpha-olefin~~ alpha-  
olefins and
- bii) a higher molecular weight polymer which is either a binary copolymer  
of ethylene and 1-butene, if the lower molecular weight polymer of aii)  
is a binary copolymer of ethylene and a C<sub>6</sub> to C<sub>12</sub> alpha-olefin, or a  
terpolymer of ethylene, 1-butene and a comonomer selected from C<sub>6</sub>  
to C<sub>12</sub> alpha-olefin; ~~a C<sub>4</sub> to C<sub>12</sub> alpha-olefin comonomer different from~~  
~~the comonomer employed in aii) or a terpolymer and two comonomers~~  
~~selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins;~~

or

~~\_\_\_\_\_ aiii) a lower molecular weight terpolymer of~~

~~\_\_\_\_\_ ethylene and two comonomers selected from C<sub>4</sub>~~

~~\_\_\_\_\_ to C<sub>12</sub> alpha-olefins;~~

~~\_\_\_\_\_ biii) a higher molecular weight terpolymer of ethylene and two comonomers~~  
~~selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins;~~

wherein all components are made by the same catalyst.

Claim 25. (previously presented) A composition as claimed in claim 24 wherein said

comonomers are selected from the group consisting of: but-1-ene, hex-1-ene, 4-methyl-pent-1-ene, hept-1-ene, oct-1-ene and dec-1-ene.

Claim 26. (previously presented) A composition as claimed in claim 25 comprising a blend of said polyethylene and a further polymer.

Claim 27. (previously presented) A compositions as claimed in claim 26 wherein said further polymer is a low density polyethylene (LDPE).

Claim 28. (currently amended) A product packaged within a heat-sealed film of a ~~multimodal~~ bimodal polyethylene produced by polymerization catalysed by a single site catalyst having more than one eta<sup>5</sup>-cyclic ligand comprising

- ai) a lower molecular weight homopolymer of ethylene and
- bi) a higher molecular weight terpolymer of ~~ethylene and two comonomers selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins, ethylene, 1-butene and a C<sub>6</sub> to C<sub>12</sub> alpha-olefin.~~

or

- a ii) a lower molecular weight polymer which is a binary copolymer of ethylene and a comonomer selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefin and
- b ii) a higher molecular weight polymer which is either a binary copolymer of ethylene and 1-butene, if the lower molecular weight polymer of a ii) is a binary copolymer of ethylene and a C<sub>6</sub> to C<sub>12</sub> alpha-olefin, or a terpolymer of ethylene, 1-butene and a comonomer selected from C<sub>6</sub> to C<sub>12</sub> alpha-olefin;

~~and a C<sub>4</sub> to C<sub>12</sub> alpha-olefin comonomer different from the comonomer employed in a ii) or a terpolymer and two comonomers selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins;~~

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or

~~—— aiii) a lower molecular weight terpolymer of ethylene and two comonomers  
selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins;~~

~~—— biii) a higher molecular weight terpolymer of ethylene with two comonomers  
selected from C<sub>4</sub> to C<sub>12</sub> alpha-olefins;~~

wherein all components are made by the same catalyst.

Claim 29. (previously presented) A product as claimed in claim 28 wherein said comonomers are selected from the group consisting of: but-1-ene, hex-1-ene, 4-methyl-pent-1-ene, hept-1-ene, oct-1-ene and dec-1-ene.

Claim 30. (previously presented) A product as claimed in claim 28 being a packaged foodstuff or liquid.